

Application No. 09/830,907
Filed: June 19, 2001
Group Art Unit: 1754

REMARKS

1. This is in response to the Office Action mailed March 26, 2003. Claims 1-8, 10-16 and 20-21 remain pending in this application.
2. Applicant has amended the specification to insert a description of the figure. The description was in the original specification on page 5, lines 34-35.
3. Applicant had filed a Preliminary Amendment on May 2, 2002, along with the original application. In addition to amending several claims, Applicant added new claims 10-19. The Examiner did not comment on claims 10-19, and, in preparing this Amendment, Applicant assumed that comments similar to those made for claims 1-9 would also apply to the newly added claims.
4. Applicant requests reconsideration of the objections to the claims. Applicant has corrected the beginning of the claims by inserting "A" or "The" as appropriate. Applicant has also amended the claims to refer to a single extrudate (referred to on page 2, line 13 of the application).

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5. Applicant requests reconsideration of the rejections under 35 USC 112, second paragraph.

a. Applicant has amended claim 6 regarding the reference to the ASTM procedure. In addition, Applicant has removed the reference to the preferred attrition from claim 6 and made it the basis for claim 20. A similar amendment was made in claim 11, and the preferred attrition therefrom was claimed in claim 21.

b. Claims 9 and 17-19 have been cancelled.

6. Applicant requests reconsideration of the rejections under 35 USC 103.

The instant invention differs from Mulaskey in pore volume and distribution of sizes of the pores. Mulaskey discloses a star shaped material having a relatively low total pore volume with a large fraction of the pores being small. The instant invention, on the other hand, relates to an extrudate of alumina having good strength in combination with a high percentage of the pores being large. Generally these properties are contradictory, as can be seen in Mulaskey, since a product having large pores tends to be very weak.

However, those pores in the instant invention that have a diameter of over 1000 nm have a volume of at least 0.05 ml/g. (See, for example, claim 1.) Since the preferred pore volume is

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between 0.5 and 0.75, the instant invention relates to a material that has 10% or more of the pore volume in the form of large pores, while still maintaining good strength.

In Mulaskey, less than 10% of the pores have a volume of greater than 100 nm. (See Mulaskey at column 5, lines 57-59) Comparing this to the pore volume of Mulaskey (between 0.25 and 0.40 ml/g), one can see that the pore distribution between the instant application and Mulaskey is very different.

The unexpectedly good mechanical properties of the extrudate of the instant application can also be seen in the results of the attrition tests, where there is less than 3% attrition in the instant application, while the attrition in Mulaskey can be up to 6%.

Neel does not add anything relating to obtaining good strength from materials having large pore dimension.

Thus the instant invention would not result from the combination of Mulaskey and Neel.

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The Examiner is encouraged to telephone the undersigned attorney to discuss any matter that would expedite allowance of the present application.

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